

REMARKS

Claims 1-33 are pending.

Claims 1-4, 11, 13-21, 26, and 28 are rejected.

Claims 29-31 have been withdrawn.

Claims 5-10, 12, 22-25, 27, 32 and 33 are objected to.

CLAIM REJECTIONS UNDER 35 U.S.C. § 112

Claim 17 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In response, Claim 17 has been cancelled.

CLAIM REJECTIONS UNDER 35 U.S.C. § 102

Claims 1, 3, 4, 13, 18, 20, and 21 were rejected under 35 U.S.C. 102(b) as being anticipated by Brumagim 2235604. As noted in the First Office Action, independent Claims 1 and 18 require a riser member having an outside surface with a forward region angled outward from the plane perpendicular to the long axis of the shank at an angle between 10 and 16 degrees. A comparison of Brumagim, Figures 2-11, and Figure 5 of the Application (together with the clear language of claims 1 and 18) reveals that the forward region of Brumagim's riser members are angled inwardly rather than outwardly as required in the present invention. Brumagim thus teaches directly away from the present invention. Moreover, the Application teaches that the angling outward is important for the purpose of the tool, namely creating vortices behind the risers. See, e.g., page 18, line 18 – page 19, line 10. Compare this to Brumagim, page 2, column 2, lines 29-

41, where the disclosure in Brumagim describes how the angle of incidence determines the "radial outward displacement" imparted to the blended liquid. In other words, the tool in Brumagim acts to compact material near the chamber wall, and the tool of the present invention works to create vortices near the chamber wall.

In sum, Brumagim neither teaches nor discloses the outwardly angled risers of the present invention claimed in claims 1 and 18 and, in fact, teaches directly away from this claim limitation. Since 1 and 18 are independent claims, Claims 1-12, which depend directly or indirectly from Claim 1, and Claims 19- 28, which depend directly or indirectly from Claim 18, are also allowable.

Claims 14-17 were rejected under 35 U.S.C. 102(b) as being anticipated by Marsh 87691. In response, Claims 14-17 have been cancelled.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-4, 18-21 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Brumagim 2235604. In response, Brumagim has been discussed above, and the reasons that Brumagim cannot support a rejection under 35 U.S.C. 103(a) are explained above. Since Brumagim teaches away from the present invention, its disclosures cannot render Claims 1-4, 18-21, and 28 obvious. Moreover, since Claims 1 and 18 are allowable over Brumagim for the reasons set forth above, Claims 2-4, 19-21, and 28 are also allowable.

Claims 11 and 26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Brumagim 2235604 in view of Brandenberger 330555. As discussed above, Brumagim teaches away from the present invention by teaching an inwardly angled riser rather than an outwardly angled riser as claimed in Claims 1 and 18, the two independent claims remaining in the Application. Brandenberger does nothing to cure the failure of Brumagim to teach such outwardly angled risers.

Indeed, the blades in Brandenberger are not angled in respect to a shank but are instead either straight or twisted into a spiral shape attached between two orthogonally positioned shanks. Brandenberger thus fails to teach outwardly angled risers, and Claims 11 and 26 are allowable over the combination of Brumagim and Brandenberger.

ALLOWABLE SUBJECT MATTER

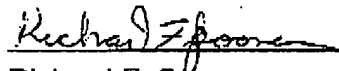
Claims 5-10, 12, 22-25, 27, 32 and 33 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims. In response, each of these Claims has been rewritten in independent form or has been amended to depend from a rewritten independent claim.

In the event that Claims 1 and 18 are allowed, Applicants request that the amendments set forth in response to these objections NOT be entered and that these claims depend from the Claims as set forth in the original application.

Notwithstanding the preceding sentence, in claim 28, please enter the substitution of "chamber" for "vessel".

If the Examiner believes personal contact would be helpful for disposition of the case, the Examiner is hereby authorized to contact applicants' representative Richard F. Spooner at (585) 423-5324, Rochester, New York.

Respectfully submitted,


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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

5) (Amended) [The improved blending tool of Claim 1, wherein the shank has a diagonal dimension and the riser member has a height dimension] An improved blending tool for rotation upon a blending machine shaft, such tool comprising:

(a) a shank having a long axis and a diagonal dimension, at least one end, and an end region proximate to the end; and

(b) a riser member fixedly mounted during rotation at the end region of the shank, said riser member having a height dimension and an outside surface with a forward region, wherein the forward region is angled outward from the plane perpendicular to the long axis of the shank at an angle between 10 and 16 degrees and wherein the ratio of the height dimension to the diagonal dimension is greater than 0.20.

6) (Amended) The improved blending tool of Claim [1] 5, wherein the shank has a diagonal dimension and the riser member has a height dimension and wherein the ratio of the height dimension to the diagonal dimension is greater than 0.25.

7) (Amended) The improved blending tool of Claim [1] 5, wherein the shank has a diagonal dimension and the riser member has a height dimension and wherein the ratio of the height dimension to the diagonal dimension is greater than 0.27.

- 8) (Amended) The improved blending tool of **Claim [1] 5**, wherein:
- (a) the blending machine shaft has an axis of rotation and imparts a direction of rotation to the improved blending tool;
 - (b) a direction exists that is orthogonal to the long axis of the shank and to the rotation axis of the shaft; and
 - (c) the blending tool further comprises at least one blade extending outward from the shank wherein at least a portion of said blade is swept backward from the orthogonal direction away from the direction of rotation.
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- 12) (Amended) The improved blending tool of **Claim [11] 5**, wherein:
- (a) each riser member has a leading and a trailing edge; and
 - (b) each riser member has at least one through hole flow port [is] located closer to the trailing edge than to the leading edge.

Claims 13 and 17 were cancelled.

22) (Amended) [The] A blending machine comprising: [of Claim 18, wherein the shank of the tool has]

- (a) a chamber for holding a media to be blended;
- (b) a blending tool mounted inside the chamber, said blending tool comprising both (i) a shank of the tool having a long axis and a diagonal dimension, at least one end, and an end region proximate to the end and (ii) a riser member fixedly mounted during rotation at the end region of the shank, said [and the] riser member of the tool [has] having a height dimension and an outside surface with a forward region, wherein the forward region is angled outward from the long axis at an angle between 10 and 16 degrees wherein the ratio of the height dimension to the diagonal dimension is greater than 0.20; and
- (c) a rotatable drive shaft, connected to the blending tool inside of the vessel, for transmitting rotational motion to the blending tool.

23) (Amended) The blending machine of Claim [18]22, wherein:

- (a) the blending machine shaft has an axis of rotation and imparts a direction of rotation to the improved blending tool;
- (b) a direction exists that is orthogonal to the long axis of the shank and to the rotation axis of the shaft; and
- (c) the blending tool further comprises at least one blade extending outward from the shank wherein at least a portion of said blade is swept backward from the orthogonal direction away from the direction of rotation.

27) (Amended) The blending machine of **Claim [26] 22**, wherein:

(a) each riser member has a leading and a trailing edge; and

(b) each riser member has at least one through hole flow port [is]

located closer to the trailing edge than to the leading edge.

28) (Amended) The blending machine of **Claim 18**, wherein:

(a) the chamber[vessel] has a wall;

(b) the riser member has a leading edge; and

(c) at least a portion of the leading edge is positioned within 6

millimeters of the wall.

Claims 29-31 were cancelled.

32) (Amended) The improved blending tool of **Claim [7] 8**, wherein:

(a) the improved blending tool is mounted inside a blending chamber having a bottom; and

(b) the blade has a curved shape that positions a portion of the blade proximate to the chamber bottom.